NEET REVISION SERIES

NEURAL CONTROL AND CO-ORDINATION

Revise Most Important Questions to Crack NEET 2020



Q-1 - 14272507

In which animal, nerve cell is present but brain is absent?

(A) Sponge

(B) Honeybee

(C) Cockroach

(D) Hydra

SOLUTION:

CORRECT ANSWER: D



Hydra possesses primitive type of nervous system.All

neurons are similar and joined with one another to form

a nerve net but brain is absent.

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Q-2 - 14272673

- If a patient suffers a stroke that destroys the optic tract on the right side of the brain, which of the following visual defects will result ?
 - (A) There will be no vision in the left eye, but vision will be normal in the right eye.
 - (B) The patient will not perceive images of objects striking the left half of the retina in the left eye.
 - (C) The patient will not perceive images of objects

strinking the right half of the retina in the right eye.

(D) Neither eye will perceive objects in the right side of

the patient's field of view.

When the right optic tract is destroyed, perception of images formed on the right half of the retina is lost, so nothing is visible at the left side of a person's field of view.

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Q-3 - 14272516

Skeletal muscles are controlled by

(A) sympathetic nerves

(B) parasympathetic nerves

(C) somatic nerves

(D) autonomic nerves

Somatic nerves innervate the skeletal

muscles.Therefore, these nerves control the movements

of the body by acting on the skeletal muscles.

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Q-4 - 17821136

The action potential of a nerve cells is

(A) 45 mV

(B) 55 nV

(C) 80 mV

(D) 75 mV

CORRECT ANSWER: A

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Q-5 - 14272520

In a man, abducens nerve is injured. Which one of the following functions will be affected ?

(A) Movement of the eyeball

(B) Movement of the tongue

(C) Swallowing

(D) Movement of the neck

CORRECT ANSWER: A

SOLUTION:

Abducens nerve is a motor nerve that controls the

movement of the eyeball. Thus, if abducens nerve is

injured, movement of the eyeball will be affected.



Q-6 - 17821136

The action potential of a nerve cells is

(A) 45 mV

(B) 55 nV

(C) 80 mV

(D) 75 mV

CORRECT ANSWER: A



Q-7 - 14272523

Which of the following nerves is purely a motor nerve?

(A) Vagus

(B) Facial

(C) Abducens

(D) Trigeminal

CORRECT ANSWER: C

SOLUTION:

Abuducens nerve is a motor nerve that controls the

movements of the eye ball.

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Q-8 - 17821141

The blood-brain barrier

(A) Consists of both anatomical and physiological factors

(B) Regulates to some extent the passage of substances from the blood to the interstitial fluid of the brain

(C) Is anatomically related to the formation of tight

juctions between adjacement capillary endothelial cells

(D) All of the above are correct

CORRECT ANSWER: D

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Q-9 - 14272525

Vagus nerve effects

(A) voice production

(B) peristalsis

(C) respectory movements

CORRECT ANSWER: D

SOLUTION:

Vagus nerve innervates the pharynx, larynx,

oesophagus, stomach, lungs, heart and intestines. It is a

mixed nerve. It controls the visceral sensations and

visceral movements (peristalsis, sound production,

respiratory movements, heart beat).



Q-10 - 17821149

Depolarization of a stimulated nerve is maintained by

(A) $Ca^{+\,+}$

(B) Cl^-

(C) $Mg^{+\,+}$

(D) K^+

CORRECT ANSWER: D

SOLUTION:

Efflux of K^+ causes repolarization. Therefore it is the

movement of K^+ that maintains the depolarized state.

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Q-11 - 14272550

In the resting state of the neural membrane, diffusion due to

concentration gradients, if allowed, would drive

(A) Ca^{2+} into the cell

(B) K^+ and Na^+ out of the cell

(C) Na^+ into the cell

(D) Na^+ out of the cell

CORRECT ANSWER: D

SOLUTION:

The concentration gradients across the resting

membrane are maintained by the active transport of ions

by the sodium-potassium pump which transports $3Na^+$

outward for $2K^+$ into cell.

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Destruction of the anterior horn cell of the spinal cord would result

in loss of

(A) Voluntary motor impulse

(B) Commissural impulses

(C) Integrating Impulses

(D) Sensory impulses

CORRECT ANSWER: A

SOLUTION:

In poliomyelitis, anterior horm cells of spinal cord are

destroyted which result in loss of motor activites of limbs.

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Q-13 - 14272560

Depolarisation of axolemma during nerve conduction takes place

because

(A) equal amount of Na^+ and K^+ move out across



(B) only Na^+ move inside

(C) more Na^+ moves outside than K^+ moving outside

(D) None of these

CORRECT ANSWER: B

SOLUTION:

NA

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Q-14 - 17821155

Which of the following option is correct for the statement 'X' and

'Y'

Statement 'X' - Immediately after repolarization, ionic imbalance is

created on both the sides of the nerve fibre

Statement 'Y' - During repularization K^+ ion channel open up and

 K^+ ion moves on innerside of plasma membrane

(A) Statement 'X' and 'Y' are correct and 'Y' is correct for 'X'

(B) Statement 'X' and 'Y' are correct and 'Y' is not correct for 'X'

(C) Statement 'X' is correct and 'Y' is wrong

(D) Statement 'X' is wrong and 'Y' is correct

CORRECT ANSWER: C

SOLUTION:

At the end of repolarization, a difference in concentration

of positve ions on two sides of plasma membrane is

generated leading to ionic imbalnce. During

repolarization, K^+ ion channels open up and K(+)

ions move out of the plasma membrane.



Q-15 - 14272563

Saltatory conduction of impulse occurs in

(A) liver cells

(B) non-myelinated nerve fibres

(C) myelinated nerve fibres

(D) None of these

CORRECT ANSWER: C

SOLUTION:

The fatty myelin sheath of myelinated nerve fibres

prevents the flow of ions between external fluid and fluid

present within the axon.At the node of Ranvier, the

insulating myelin sheath is absent and thus, the ionic

flow occurs at these points only. Therefore, the action potential jumps from node to node, due to which the transmission of impulse is more rapid in myelinated fibres. This is called the saltatory conduction of nerve impulse.

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Q-16 - 17821163

Nerve impulse travels faster in

(A) Medullated nerve

(B) Non-medullated nerve



(D) Spinal nerve

CORRECT ANSWER: A

On medullated nerve fibres speed of nerve impulse is

about 20 times faster than on non-medulalted nerve

fibres.



Q-17 - 14272576

Which of the following options correctly describes the sequence of structures present between a receptor and an effector when D refers dendrite, A refers axon, S refers synapse and CB refers to cell body

(A) D-CB-A-S-D-CB-A

(B) A-D-CB-S-A-D-CB

(C) D-CB-A-S-A-CB-D

(D) D-A-S-CB-D-A-CB

CORRECT ANSWER: A

SOLUTION:

NA

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Q-18 - 17821165

Synaptic vesicle is found in

(A) Pre-synaptic neuron

(B) Post synaptic neuron

(C) Synaptic left

(D) None of these

CORRECT ANSWER: A

In a synapse, the transmitting cell is called the presynaptic cell and the gap in between is called a synaptic cleft. Synaptic vesicles are found in presynaptic neruron. They contain neurotransmitters which on stimulation are released into synaptic cleft and then these chemicals combine with the receptors on the postsynaptic neuron causing depolarization.



Q-19 - 14272581

What is the space between arachnoid and piameter called ?

(A) Supra-arachnoid space

(B) Sub-arachnoid space

(C) Subdural space

CORRECT ANSWER: B

SOLUTION:

Piameter is the innermost membrane of the brain and arachnoid is the middle membrane. The space between arachnoid and piameter is called sub-arachnoid space. This space is filled with cerebrospinal fluid

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Q-20 - 17821168

For visual sense, the nerve impulse is generated by

(A) Depolarisation

(B) Repilarisairion

(C) Hyper polarisation

CORRECT ANSWER: D

SOLUTION:

Nerve impulse is a self propagating wave of

depolarization and repolarization.

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Q-21 - 14272589

The Broca's area and Wernicke's centre are the association areas

situated in cerebrum. These are associated with



(B) blind spot

(C) memory

CORRECT ANSWER: D

SOLUTION:

Broca's area is the motor speech area and Wernicke's area plays role in understanding speech and writing words.

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Q-22 - 17821174

Which of the following substances leads to the inhibition of central

nervous system

(C) Nor epinephrine

(B) GABA

(A) Glycine

(D) Both 'a' and 'b'

CORRECT ANSWER: D

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Q-23 - 14272593

Which part of the human brain controls the urge for eating and drinking?

(A) Forebrain

(B) Midbrain

(C) Hindbrain

(D) Spinal cord

CORRECT ANSWER: B

Hypothalamus is a part of forebrain that controls the

urge for eating and drinking.



Q-24 - 17821177

Parkinson's disease (Characterized by tremors and progressive

rigidity of limbs) is cause by degeneration of brain neurons that are

involved in movement control and make use of neurotransmitter

(A) Acetylcholine

(B) Nor epinephrine

(C) Dopamine



CORRECT ANSWER: C

Parknson's disease in charactrised by tremors and

progressive rigidity of limbs caused by a degeneration of

brain neurons and a neurotrasnmitter called dopamine.

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Q-25 - 14272596

Anterior choroid plexus is present on the

(A) floor of diencephalon

(B) cerebral hemispheres

(C) roof of diencephalon

(D) roof of medulla oblongata

CORRECT ANSWER: C

Epithalamus (roof of diencephalon) in thin and not

formed of nervous tissue. Its anterior part is vascular and

folded to form the anterior choroid plexus.

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Q-26 - 17821181

Hypothalamus does not control

(A) Hunger and satiety

(B) Thermoregualtion

(C) Libido

(D) Creative thinking and consciousness

CORRECT ANSWER: D

Hpothalarmus contains higher nerve centre for

temperature regulation, hunger, thirst and

osmorgulation.

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Q-27 - 14272598

Which function will be lost if occipital lobe is damaged?

(A) Hearing

(B) Speech

(C) Vision

(D) Memory

CORRECT ANSWER: C

Occipital lobe is concerned with decoding and

interpretation of visual information, shape and

colour. Thus, if occipital lobe is damaged, vision will be

lost.



Q-28 - 30524679

Neurosecretory cells occurs in

(A) Hypothalamus

(B) Cerebral cortex

(C) Medulla oblongata

(D) Corpus callosum

CORRECT ANSWER: A

Hypothalamus also contains several groups of

neurosecretory cells, which secrete hormones called

hypothalamic hormones.

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Q-29 - 14272600

The optic lobes in humans are represented by the corpora

(A) bigemina

(B) arenacea

(C) striata

(D) quadrigemina

CORRECT ANSWER: D

The upper or superior surface of the midbrain has two pairs of rounded protrusions collectively called the corpora quadrigemina, one pair is called superior colliculi and the other pair is called inferior colliculi. The superior and inferior colliculi of each side are termed the corpora bigemina. The superior colliculi are concerned with the sense of sight.

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Q-30 - 30524685

In myasthenia gravis, acetylcholine

(A) Receptors on motor end plate are reduced

(B) Secretion from nerve terminals is reduced

(C) Esterase activity is prohibited

(D) Secretion from nerve terminals is enhanced

In myasthenia gravis, acetylocholine receptors on motor

end plate are reduced.

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Q-31 - 14272608

The respiratory and cardiac centres are located in

(A) cerebrum

(B) diencephalon



(D) medulla oblongata

CORRECT ANSWER: B

Medulla oblongata is the posterior most part of the brain.It contains centres which control respiration, salivation, sneezing cardiovascular reflexes and gastric secretions.

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Q-32 - 30524694

Light sensitive cells of eye are present in

(A) Cones

(B) Sclera



(D) Retina

CORRECT ANSWER: D

Light sensitive cells of eye are present in retina.



Q-33 - 14272616

Which of the following has H-shaped grey matter?

(A) Cerebrum

(B) medulla oblongata

(C) cerebellum

(D) Spinal cord

CORRECT ANSWER: D

SOLUTION:

NA



Q-34 - 30524696

Colour blindness is due to defect in

(A) Cones

(B) Rods

(C) Rods and cones

(D) Rhodopsin

CORRECT ANSWER: A

SOLUTION:

Colour blindness is due to defect in cones.



Q-35 - 14272620

Which of the following is an example of conditioned reflex ?

(A) Hand withdraws when pierced with a needle

(B) Eyes close, when anything enters into them

(C) During digestion, food goes forward in alimentary canal

(D) Trained dog salivates when you ring a bell

CORRECT ANSWER: D

SOLUTION:

Trained dog salivates when you ring a bell is an example

of conditined reflexes are acquired, dependent on past

experience, training and learning

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Q-36 - 30524701

The purplish red pigment rhodopsin contained in the rods type of

photoreceptor cells of the human eye, is a derivative of

(A) Vitamin A

(B) Vitamin B

(C) Vitamin C

(D) Vitamin D

CORRECT ANSWER: A

SOLUTION:

Purplish red pigment rhodopsin contained in rod type of

photoreceptor cells of the human eye, is a derivative of

vitamin A called retinal.

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Q-37 - 14272627
Cornea transplant in humans is almost never rejected. This is

because

(A) it is composed of enucleated cells

(B) it is a non-living layer

(C) its cells are least penetrable by bacteria

(D) it has no blood supply.

CORRECT ANSWER: D

SOLUTION:

Cornea is a transparent layer that forms the anterior

one-sixth of the eye ball. It helps of focus light waves as

they enter the eye.Cornea has no blood supply,

therefore, it can be transplanted successfully.



The co-ordinator between Nervous and endocrine system is

(A) Thalamus

(B) Hypothalamus

(C) Limbic system

(D) Parietal lobe

CORRECT ANSWER: B

SOLUTION:

Hypothalamus is bridge between nervous system and

endocrine system.



Q-39 - 14272631

The shape of eye lens is changed by

(A) pupil

(B) iris

(C) optic nerve

(D) ciliary muscle

CORRECT ANSWER: B

SOLUTION:

Ciliary muscles are circular sheet of smooth muscle

fibres present within the ciliary body. These muscles

alter the shape of the lens during contraction.



Q-40 - 30970053

Examine the diagram of the two cell types A and B given below and

select the correct option.



(A) Cell A is the rod cell found evenly all over retina.

(B) Cell A is the cone cell more concentrated in the

fovea centralis.

(C) Cell B is concerned with colour vision in bright light.

(D) Cell A is sensitive to low light intensities.

CORRECT ANSWER: B

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Q-41 - 14272634

Why is it difficult to differentiate between red and green colour

objects in dark or in night?

(A) Rods work well only during daytime

(B) Cones work well only during daytime

(C) Rods work well only during night time

(D) Cones work well only during night time

CORRECT ANSWER: B

SOLUTION:

Cones operate only in bright light, hence the different types of cones (i.e., blue, red or green-sensitive) are active during daytime or in presence of light. It is because of this reason, that the person is unable to differentiate between green and red colour in night time.

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Q-42 - 30970060

Bipolar nerve cells are present in

(A) Skin tactile corpuscles

(B) Spinal cord

(C) Retina of eye

(D) All the above

CORRECT ANSWER: C

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Q-43 - 14272639

The point in eye of mammals from which optic nerves and blood

vessels leave the eye ball is called

(A) yellow spot

(B) blind spot

(C) pars optica

(D) green spot

CORRECT ANSWER: B

SOLUTION:

Blind spot lies close to the yellow spot of the eye and

lacks receptor cells (rods and cones) because the optic

nerves leave the eye ball from here.

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Q-44 - 30970055

Hearing impairment affects which part of brain ?

(A) Frontal lobe

(B) Parietal lobe

(C) Temporal lobe

(D) Cerebellum

CORRECT ANSWER: C



Q-45 - 14272644

The fluid filled in the space between lens and cornea is termed as

(A) vitreous humour

(B) aqueous humour

(C) synovial fluid

(D) CSF

CORRECT ANSWER: B

SOLUTION:

Aqueous humour is a watery, alkaline liquid filling the anterior compartment of the eye. It is present between the cornea and the lens. It maintains the shape of the

cornea and supplies nutrition to both lens and cornea.

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Q-46 - 30970061

Fenestra ovalis is the opening of

(A) Cranium

(B) Tympanum

(C) Tympanic cavity

(D) Brain

CORRECT ANSWER: C

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Q-47 - 14272648

The light stricking the retina generates nerve impulse. Which of the

following options correctly describes the path of light ?

(A) Photosensory cells \rightarrow Bipolar neurons \rightarrow

Ganglionic cells \rightarrow Sensory nerves

(B) Sensory nerves \rightarrow Bipolar neurons \rightarrow

Ganglionic cells \rightarrow Photosensory cells

(C) Sensory nerves \rightarrow Ganglionic cells \rightarrow Bipolar

neurons \rightarrow Photosensory cells

(D) Photosensory cells \rightarrow Ganglionic cells \rightarrow Bipolar

neurons \rightarrow Sensory nerves

CORRECT ANSWER: C

SOLUTION:

NA

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Q-48 - 30970062

Multipolar nerve cells are present in



(B) Dorsal root ganglia of spinal cord

(C) Retina of eye

(D) Brain

CORRECT ANSWER: B

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Q-49 - 14272650

Which of the following statements is incorrect?

(A) Sympathetic neural system controls and coordinates organs which are under voluntary control

(B) Deficiency of vitamin A can causes night blindness

(C) Malleus is the largest ear ossicle

(D) Cranial nerve IX is a mixed nerve

SOLUTION:

Sympathetic neural system is a part of autonomic

nervous system. It controls and coordinates organs which

are under involuntary control.

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Q-50 - 30970020

A gymnast is able to balance his body upside down even in the total

darkness because of

(A) Tectorial membrane

(B) Organ of corti

(C) Cochlea

(D) Vestibular apparatus

SOLUTION:

A gymnast is able to balance his body upside down even

in the total darkness because of vestibular apparatus.

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Q-51 - 14272652

Select the option that correctly matches the structures with its

location and function.

(A)

Structure Location Fun

Eustachian tube Anterior part of internal ear Equ

(B)

Structure Location Function

Cerebellum Midbrain Controls respiration and gas



 Structure
 Location
 Function

 Hypothalamus
 Forebrain
 Controls body temperate

 (D)
 Structure
 Location

 Blind spot
 Near the place where optic nerve leaves the structure

CORRECT ANSWER: C

SOLUTION:

NA

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Q-52 - 30524686

The optic lobes in humans are represented by the corpora

(A) Bigemina

(B) Quadrigemina

(C) Arenacea

CORRECT ANSWER: B

SOLUTION:

Optic lobes in humans are represented by corpora

quadrigemina.

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Q-53 - 14272654

Bony labyrinth is filled with a fluid called

(A) endolymph



(C) hololymph

(D) juxtalymph

SOLUTION:

Internal ear (membranous labyrinth) is surrounded by an almost similar shaped bony labyrinth. The membranous labyrinth is joined to the bony labyrinth at certain points, but its greater part is separated from the bony labyrinth by a narrow perilymphatic space. This space is filled with a watery fluid called perilymph that closely resembles cerebrospinal fluid.



Neurons is sponges are

(A) unipolar

(B) bipolar

(C) multipolar

(D) absent

CORRECT ANSWER: D

SOLUTION:

NA

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Q-55 - 17281130

[If A,B,C are the angles of a triangle such tha

 $\cot(A)/(2)=3\tan(C)/(2)$, then sin A, sin B, sin C are in]



Q-56 - 14272529

How many pairs of cranial nerves are mixed nerves ?

(A) 3

(B) 5

(C) 4

(D) 6

CORRECT ANSWER: C

SOLUTION:

4 pairs of cranial nerves are mixed nerves. These are

trigeminal, facial, glossopharyngeal and vagus nerves.

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Q-57 - 17281139

[+57891+0512]



Q-58 - 17281143

The number of molecules in 16 g of methane is

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Q-59 - 14272536

Sympathetic neural system induces

(A) secretion of digestive juices

(B) heartbeat

(C) secretion of saliva



(D) all of these

CORRECT ANSWER: B

SOLUTION:

Sympathetic neural system accelerates heartbeat and

inhibits secretion of digestive juices and saliva.

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Q-60 - 17821151

Nerve gas affects neuromuscular activity by

(A) Blocking the acetylcholine receptor sites

(B) Inhibiting the release of acetylcholine

(C) Inhibiting acetylcholinesterase

(D) Enhancing the release of acetylcholine

CORRECT ANSWER: C



Which of the following pairs correctly identifies function of parasympathetic nervous system?

(A) Slows heartbeat, promotes pancreatic secretion

(B) Increases secreation of sweat gland and intestinal gland

(C) Accelerates heartbeat, dilates arteries

(D) Raises blood pressure, increases peristaltic activity

CORRECT ANSWER: A

SOLUTION:

NA



Which of the following is not a type of neurogial cell

(A) Astrocytes

(B) Oligodendrocytes

(C) Microglia

(D) Chondrocytes

CORRECT ANSWER: D

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Q-63 - 14272543

Myelin sheath is formed by

(A) Ranvier cells

(B) muscle cells

(C) Schwann cells

(D) axon

CORRECT ANSWER: C

SOLUTION:

Each segment of myelin sheath is formed by one

Schwann cell.Myelin sheath is present in the myelinated

nerve fibres. It is made up of a substance of lipids,

proteins and water called myelin and serves as an

insulating layer, preventing loss of energy of the nerve

impulse during its passage along the fibre.



Q-64 - 17821158

All sensory pathways to the correct cortex synapse at the

(A) Pons

(B) Hypothalamus

(C) Thalamus

(D) Cerebellum

CORRECT ANSWER: A

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Q-65 - 14272547

Which of the following options illustrates the distribution of

Na^+ and K^+ ions in a section of non-myelinated axon which is

at resting potentail?

(a) $(K^* high) + + + + (A)$

(C) (c)
$$\frac{Na^{+} low}{K^{+} high}$$

(d)
$$(K' low)$$

(D) $(K' low)$

SOLUTION:

When a neuron is at resting potential, i.e., not

conducting any impulse, the axonal membrane is

comparatively more permeable to K^+ ions and nearly

impermeable to Na^+ ions.Consequently, the axoplasm

inside the axon contains high concentration of $K^{\,+}$

ions.In contrast, the fluid outside the axon has a high

concentration of Na^+ ions and thus, forms a

concentration gradient.



Q-66 - 17821164

The amount of CSF in the cranial cavity is

(A) 500 ml

(B) 140 ml

(C) 1 litre



CORRECT ANSWER: B

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During the propagation of a nerve impulse, the action potential results from the movement of

(A) K^+ ions from intracellular fluid to extracellular fluid (B) Na^+ ions from extracellular fluid to intracellular fluid (C) K^+ ions from extracellular fluid to intracellular fluid

(D) Na^+ ions from intracellular fluid to extracellular fluid

CORRECT ANSWER: B

SOLUTION:

Action potential is a change in electrical potential that

occurs across a plasma membrane during the passage

of a nerve impulse. During this period, there is a localised

and transient switch in electric potential across the

membrane from -70 mV to +45 mV. It is due to the fact that the sodium channels open and the potassium channels remain closed. As a result, sodium channels permit the influx of Na^+ by diffusion from extracellular fluid to intracellular fluid.

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Q-68 - 17821166

Nerve impulse initiates with the movements of

or

Neuron becomes an electrically charged cell by the diffusion of

(A) K^+

(B) $Mg^{\,+}$

(C) Ca^+

(D) Na^+ ions from intracellular fluid to extracellular fluid

SOLUTION:

Na^+ enters in the axoplasm leading to depolarization of the nerve.

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Q-69 - 14272566

Which of the following statements is/are incorrect about the

electrical synapse?

(i)At electrical synapses, the membranes of pre and post synaptic

neurons are in very close proximity.

(ii)Electricity current can flow directly from one neuron into the

other across the synapses.

(iii)Transmission of an inpulse across electrical synapses is very

similar to impulse conduction along single axon.

(iv)Electrical synapses pass electrical signal between cells with the

use of Ach.

(v)Electrical synapses are fast.

(vi)Electrical synapses are rare in our system.

(A) (ii),(iv) and (v)

(B) (i) and (iii)

(C) (iv) only

(D) (i),(v) and (vi)

CORRECT ANSWER: C

SOLUTION:

At electrical synapse, the transfer of impulse occurs by

purely electrical means without involving any

neurotransmitter.



The enzyme required for the conduction of nerve impulses across

synapse is

- (A) Peroxidase
- (B) Choline acetylase
- (C) Ascorbic acid oxidase
- (D) Succinic dehydrogenase

CORRECT ANSWER: B

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Q-71 - 14272575

Unidirectional transmission of a nerve impulse through nerve fibre

is due to the fact that

(A) nerve fibre is insulated by a medullary sheath

(B) sodium pump starts operating only at the cyton and then continues into the nerve fibre

(C) neurotransmitters are released by dendrites and not by axon endings

(D) neurotransmitters are released by the axon endings and not by dendrites.

CORRECT ANSWER: D

SOLUTION:

A nerve impulse is transmitted from one neuron to

another with the help of chemicals called

neurotransmitters that are released by the axon endings

formed by the membrane of a pre-synaptic neuron (axon

ending part) and a post-synaptic neuron which may or

may not be separated by synaptic cleft.

Q-72 - 17821176

The brain stem is made up of

(A) Midbrain, pons, cerebellum

(B) Midbrain, pons, medulla oblongata

(C) Diencephalon, medulla oblongata, cerebellum

(D) Cerebellum, cerebrum, medulla oblongata

CORRECT ANSWER: B

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Q-73 - 14272577

Brain depends on blood for the supply of

(A) ATP and glucose

(B) oxygen and ATP

(C) oxygen and glucose

(D) oxyen and electrolytes

CORRECT ANSWER: C

SOLUTION:

Brain performs a number of activities like it controls the functions of our organs and also provides qualities of learning, reasoning and memory.For all the activites, brain needs a large and constant supply of energy.The brain accounts for 20% of body's consumption of oxygen

and 15% of consumption of blood glucose. If brain is

deprived of oxygen for just 5 minutes, it becomes

permanently damaged.Mental confusion occurs if brain

is deprived of glucose.



Q-74 - 17821178

One of the example of the action of the autonomous nervous system

is

(A) Knee-jerk response

(B) Pupillary reflex

(C) Swallowing of food

(D) Peristalsis of the intestines

CORRECT ANSWER: D

SOLUTION:

Autonomic nervous system regulates and coordinates
involuntary activites like heart beating, homeostasis

body temperature. Breathing gut peristalsis and

secretion of glands.

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Q-75 - 14272588

Which of the following structures is found in diencephalon?

(A) Pons

(B) Basal ganglia

(C) Corpora quadrigemina

(D) Hypothalamus

CORRECT ANSWER: D

SOLUTION:

Hypothalamus is present at the base of diencephalon.

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Q-76 - 17821182

You are watching a horror movie and you notice that your heart is beating fast and mouth is dry. It is because of

(A) Fight and fight response

(B) Authonomic nervous system

(C) Sympathetic nervous sysetm

(D) Both (a) and (c)

CORRECT ANSWER: D



Q-77 - 14272591

Human bod temperature is maintained by

(A) hypothalamus

(B) medulla oblongata

(C) pituitary

(D) cerebral cortex

CORRECT ANSWER: A

SOLUTION:

Hypothalamus is a part of forebrain. It is the

thermoregulatory centre of the brain. It keeps body

temperature at roughly 37^C by means of a complex

thermostat system.

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Q-78 - 17821173

Intercellular communication in multicellular organism occurs

through

- (A) Digestive system only
- (B) Respiratory system only
- (C) Nervous system only
- (D) Both nervous and endocrine system

CORRECT ANSWER: D

SOLUTION:

Animlas have two system of co-ordination i.e., nervous

system and endocrine system. Neurones are the basci

structural and functional units of the basic structural and

functional units of the nervous system which spread

through out the organism forming a complex

communication network transmitter is one that is

released by an inhibitory neuron. it can inhibit impulse at

synapse.

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Q-79 - 14272594

Broca's area in human brain controls

(A) speech

(B) taste

(C) respiration

(D) heartbeat

CORRECT ANSWER: A

SOLUTION:

Broca's area is the motor speech area lying in the frontal

lobe of cerebrum.



Q-80 - 14272672

The sensory receptors that respond to sound, develop receptor

potentials when their

(A) hair are bent

(B) pigments absorb pressure

(C) surface proteins are altered by a change in pH.

(D) sodium-potassium pumps become deactivated.

CORRECT ANSWER: A

SOLUTION:

The organ of Corti is a structure located on the basilar membrane which contains hair cells that act as auditory receptors. Movements of the basilar membrane bend the hair cells, pressing them against the techorial membrane. As a result, nerve impulses are generated in the associated afferent neurons. These impulses are transmitted by the afferent fibres via auditory nerves to the auditory cortex of the brain, where the impulses are analysed and the sound is recognised.

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